The above-described semiconductor package can yield significant benefits. Because of the smaller height of the recess portions (as compared to the molding cavity), the molding compound flows into the recess portions and rapidly absorbs heat from the mold, thereby increasing the viscosity and reducing the flow rate of the molding resin. The slowed-down molding resin can therefore be prevented from flashing out of the air vents, thereby avoiding the resin flash problem encountered in the prior art (as illustrated in FIG. 2). Moreover, in accordance with the Applicants' invention, molding compounds with more flexible filler sizes and fluidities can be utilized to fabricate the encapsulant.

Claims 8-12 were rejected under 35 USC 103(a) as being unpatentable over "Prior Art Figures 1-2" in view of U.S. Patent 6,173,490 to Lee et al. (hereinafter "Lee"). This rejection is respectfully traversed.

As noted in the Office Action, prior art FIGS. 1 and 2 "fail to teach a molding cavity formed with a plurality of recess portions, which are dimensioned to be relatively smaller in height than the molding cavity" (Office Action, Page 3).

Lee fails to remedy the deficiencies of prior art FIGS. 1 and 2. Lee fails to teach or suggest a semiconductor package having recess portions connected to an air vent formed in a mold, or where encapsulant is formed with a plurality of outwardly-extending portions by the molding compound filled in the recess portions.

In Lee, referring to FIGS. 3 to 4B as cited in the Office Action, a molding cavity 240 includes a plurality of adjacent package recesses 230 each suitable for receiving and encapsulating an integrated circuit 402, the package recesses 230 being defined with a matrix of ridges 220 (see column 3, lines 22-26). This structure facilitates a subsequent singulation step to separate apart the plurality of fabricated packages, so as to solve the problem of warpage in conventional uniform molding, which may obscure the position of each integrated circuit and make subsequent singulation difficult and time consuming (see column 1, lines 47-64).

In Lee, each package recess 230 forms a cavity for encapsulating a respective integrated circuit 402, but the package recess 230 does not have a plurality of recess portions each connected to an air vent. Therefore, Lee does not teach or suggest an encapsulant formed with a plurality of outwardly-extending portions by the molding compound filled in the recess portions, as required in claim 8. Moreover, there is no teaching or suggestion in Lee of forming reduced-height recess portions in the molding cavity to reduce the flow speed of the molding compound, in order to prevent the molding compound from flashing out of air vents. Therefore, Lee cannot be combined with prior art FIGS. 1 and 2 to produce the Applicants' claimed invention, for at least the above reasons.

In the previous response, Applicants pointed out that the combination of prior art FIGS. 1 and 2 in view of Lee does not teach or suggest "**the recess portions each connected to an air vent formed in the mold**," as recited in claim 8. The Examiner is kindly requested to explain how this feature is being read in the Lee reference.

It is believed the application is in condition for immediate allowance, which action is earnestly solicited. However, should there be any remaining issues, the Examiner is urged to contact the undersigned Applicants' representative at the phone number listed below.

Respectfully submitted,

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APPENDIX A:
VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS

Claims 1-7 have been canceled without prejudice.

Claim 8 has been amended as follows:

8. (Amended) A semiconductor package, comprising:

a substrate mounted with at least one semiconductor chip thereon and electrically connected to the semiconductor chip; and

an encapsulant formed by a molding compound injected into a molding cavity of a mold for encapsulating the semiconductor chip mounted on the substrate, wherein the molding cavity is formed with a plurality of recess portions, which are dimensioned to be relatively smaller in height than the molding cavity, and the recess portions are each connected to an air vent formed in the mold for interconnecting the recess portions and outside of the mold, such that the encapsulant is formed with a plurality of outwardly-extending portions by the molding compound filled in the recess portions of the molding cavity.